# **Blockchain & Ethereum**

# **Career Transformation Guide (2022)**



**Salaries-Certifications-Publications-Communities** 

Success awaits you

**Blockchain VIPs** 

## **Executive Summary**

The mission of <u>Blockchain VIPs</u> is to equip and enable the next generation of Blockchain-related professionals and employers worldwide with skills and talent to achieve 21st century IT and financial goals. Key professional titles include Business Analyst, Architect, Developer, Programmer, Coder, Expert, Trader, Investor, and many others. Among the most common certifications are Certified Blockchain Architect (CCA), Certified Ethereum Expert (CEE), Certified Corda Architect (CCA), Certified Blockchain and Hyperledger Developer (CBHD) - included in Section II of this report. Technologies: Blockchain, Corda, DApps, Distributed Ledger (DLT), Ethereum, EOS, TRON, Quorum, Smart Contracts, Solanana, Solidity and Stellar. Our partnerships include Associates: Blockchain Council, Blockchain Hub, Blockchain Training Alliance, BlockGeeks, Ethereum.org, Linux Foundation and IEEE.

This <u>Blockchain and Ethereum Career Transformation Guide</u> includes valuable information that enables you to accelerate your career growth and income potential - Salaries (demand and growth), Certifications and Training programs, Publications and Portals along with Professional Community and Networking resources.

Udacity provides a comprehensive description of job titles, salaries and demand outlook for Blockchain developers. ZipRecruiter, the average blockchain developer salary in the U.S. is \$154,550 annually with a range between \$124,500 and \$203,000, with skill, experience and location being major factors. New York City and the San Francisco Bay Area-Silicon Valley areas typically offer the highest salaries.

There are three critical success factors in our career transformation model. First, <u>Get Certified</u>. Professionals with best in-class skill sets combined with industry-leading certifications advance more rapidly than your peers and typically earn 3%-5% above their colleagues. Second, <u>Get Published</u>. Relevant, succinct and insightful articles on best practices in your technical domain or functional discipline enhance your credibility and integrity. And third, <u>Get Connected</u>. Developing and maintaining a robust professional network - locally and globally - bolsters your career persona and positions you as the "go to" subject matter expert in your field.

# I - Salaries (Demand & Growth)

<u>Glassdoor</u> includes Reviews for some 108 <u>Blockchain</u> and 8 <u>Ethereum</u> positions. <u>Indeed</u> reports companies, salaries and open positions for <u>Blockchain</u> and <u>Ethereum</u> professionals across the US. According to ZipRecruiter there are 17,842 <u>Blockchain</u> and 236 <u>Ethereum</u> openings in the US. LinkedIn currently has 27,244 job listings for <u>Blockchain</u> and another 4526 <u>Ethereum</u> professionals.

Along with standard software development titles - such as Software Programmer, Software Engineer, Senior Developer, etc - the most common titles for Blockchain and Ethereum professionals include:

#### Blockchain:

- Blochain Architect
- Blockchain Engineer
- Blockchain Full Stack Developer
- Blockchain Research Engineer
- Blockchain Security Analyst
- Business Development Director for Crypto, Blockchain & NFT
- Crypto Blockchain Developer
- Senior Blockchain Engineer
- Senior Blockchain Software Engineer

#### Ethereum:

- Ethereum Engineering Manager
- Group Manager for Digital Assets Custody
- Lead Software Engineer for Ethereum & Blockchain
- Senior Ethereum Engineer
- Smart Contract Developer for Solana & Ethereum
- Smart Contract Developer for Solidity/DEXs
- Staff Software Engineer for Ethereum Integration
- Technical Ethereum Product Manager

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With a limited number of qualified blockchain professionals in the market, the salaries being offered are highly competitive.

#### Conclusions:

- 1. Our premise is that professionals with currency-relevant certifications earn approximately 3%-5%+ more than their peers.
- 2. As Blockchain and Ethereum technologies move from early adopter to mass market maturity demand for certified staff will increase proportionately.

3. With the supply-demand "imbalance" for qualified professionals over the next 3-5+ years career and income opportunities strongly favor candidate job seekers vis—vis employers.

Certified Blockchain and Ethereum experts will have virtually unlimited growth potential during the coming decade. Take advantage of this mega-trend and reap the rewards.

(Note: Access the complete Global Knowledge 2021 IT Skills and Salary Report here).



## **II - Certification & Training**

<u>Certified Blockchain Architect (CBA):</u> CBA training entitles you to utilize your expertise to make important decisions related to the Blockchain projects and craft the guidelines and structure of the whole blockchain system {Blockchain Council}

<u>Certified Blockchain and Digital Marketing Professional (CBDMP):</u> Gain expertise on eliminating digital marketing middlemen, eliminating online ad fraud, building trust and transparency while giving customers full control of their information with the use of Blockchain technology. {Blockchain Council}

<u>Certified Blockchain and Healthcare Professional (CBHP):</u> Major breakthrough in the healthcare industry, especially in terms of Health Information Exchange, by improving data integrity, regulatory compliance, and privacy. {Blockchain Council}

<u>Certified Blockchain and Human Resources Professional (CBHRP)</u>: Equips HR professionals in talent management, verifying the accreditation of potential hires, safeguarding of employee health records, and performance evaluation. {Blockchain Council}

<u>Certified Blockchain and Know Your Customer Professional (CBKYCP):</u> speed up and streamline the procedure of digital identity verification, cross border payments, syndicate lending and to reduce anti-money laundering activities in the banking sector. {Blockchain Council}

<u>Certified Blockchain and Law Professional (CBLP)</u>: Expedite and streamline the process of tracing digital documents for evidence and automate the agreement process using smart contracts. {Blockchain Council}

<u>Certified Blockchain and Supply Chain Professional (CBSCP)</u>: Understand how Blockchain can be leveraged to increase revenue, decrease costs, improve quality, production. {Blockchain Council}

<u>Certified Blockchain Business Foundations (CBBF)</u>: Blockchain Business Models and Analysis. {Blockchain Training Alliance}

<u>Certified Blockchain Developer (CBD)</u>: Equipped in Blockchain, Multichain, Ethereum, Hyperledger, Stellar and Corda. {Blockchain Council}

<u>Certified Blockchain Developer - Ethereum (CBSE)</u>: Ethereum platform - Plan and prepare production ready applications for the Ethereum blockchain, Write, test, and deploy secure Solidity smart contracts, Understand and work with Ethereum fees, Work within the bounds and limitations of the Ethereum m blockchain, and Use the essential tooling and systems needed to work with the Ethereum ecosystem. {Blockchain Training Alliance}

Certified Blockchain Developer - Hyperledger Fabric (CBDH): Blockchain Hyperledger Development, Plan and prepare production-ready applications for the Hyperledger blockchain, Write, test, and deploy secure chain code, Understand how to use Hyperledger Composer to rapidly build Hyperledger applications, and Write chain code using either Go or NodeJS. {Blockchain Training Alliance}

<u>Certified Blockchain Expert (CBE):</u> CBE is exhaustive training, an exam-based Blockchain certification aiming to impart in-depth practical knowledge in Blockchain technology. {Blockchain Council}

<u>Certified Blockchain Security Professional (CBSP)</u>: Blockchain's inherent security features and associated risk, best practices, known Blockchain cyber-attacks, differentiate between Blockchain cyber-attacks and threat mitigation {Blockchain Training Alliance}

<u>Certified Blockchain Solution Architect (CBSA)</u>: Blockchain Architecture, CBSA exam is a 70 question multiple-choice exam that lasts 1.5 hours and is a performance-based evaluation of Solution Architect skills and knowledge. {Blockchain Training Alliance}

<u>Certified Corda Architect (CCA):</u> Build architectural knowledge to make important decisions related to the corda projects and craft the guidelines and structure of the whole corda system. {Blockchain Council}

<u>Certified Corda Expert (CCE):</u> Expertly curated and excellently designed training, rendering profound knowledge on various aspects of corda blockchain platform. {Blockchain Council}

<u>Certified Ethereum Expert (CEE)</u>: Understanding of Ethereum Blockchain, Smart Contracts and Decentralized applications, use cases and transfer or mitigate Blockchain for businesses and enterprises. {Blockchain Council}

<u>Certified Hyperledger Developer (CHD):</u> Grasp Hyperledger Fabric and Composer. Businesses can leverage the Hyperledger technology to enhance internal data. integrity{Blockchain Council}

<u>Certified Hyperledger Expert (CHE):</u> This Hyperledger certification will cover all the details regarding the architecture of hyperledger fabric and composer. It will also help you to understand the hyperledger family, so you can begin building blockchain applications on top of hyperledger platform. {Blockchain Council}

<u>Certified Hyperledger Fabric Administrator (CHFA)</u>: Equips candidates to demonstrate their competence in deploying and operating a Hyperledger Fabric network through the command line {Linux Foundation}

<u>Certified Hyperledger Sawtooth Administration (CHSA)</u>: Enables candidates to demonstrate their competence in deploying and operating a Hyperledger Sawtooth network through the command line. {Linux Foundation}

<u>Certified Quorum Developer (COD):</u> Quorum development is a highly sought after skill as Quorum addresses specific challenges to blockchain technology adoption within the financial industry. {Blockchain Council}

<u>Certified Quorum Expert (CQE):</u> Quorum is an enterprise-focused, private-permissioned blockchain infrastructure specifically designed for commercial use cases. {Blockchain Council}

<u>Certified Smart Contract Developer (CSCD):</u> Understand deeply what Smart Contracts are and how to create them wisely over any Blockchain platform by programming it over Solidity. {Blockchain Council}

<u>Certified Solidity Developer (CSD):</u> Solidity is the native language of ethereum which gives enterprises the complete advantage of launching projects on the ethereum blockchain platform. {Blockchain Council}

#### Other

<u>Become a Blockchain Developer</u>: Creating your own private blockchain using Node.js and Leveldb (Project: Create Your Own Private Blockchain), Ethereum Smart Contracts, Tokens and

Dapps - advance your blockchain skillset to the second generation of blockchain services with smart contracts utilizing the Ethereum network (Project: Build CryptoStar DApp on Ethereum), .Blockchain Architecture - learn blockchain architecture and advanced concepts such as privacy, security and decentralized file management (Project: Ethereum DApp for Tracking Items Through Supply Chain), Dapp with autonomous smart contracts and oracles - strengthen your blockchain skill set by developing a decentralized application (DApp) that will perform actions based on external triggers, and handle payments (Project: Flight Delay Insurance DApp), and Capstone Project - build decentralized property listing application. {Udacity}

Blockchain: Foundations and Use Cases: certificate program examines business use cases, hear from industry leaders, and give you the opportunity to develop and analyze a use case yourself.. The five core modules in this program include: 1) Blockchain Foundations: Why are People Excited About Blockchain?. The Brief, Brief History of Blockchain The Move to Decentralization, Ledgers, Distributed Ledgers, and Consensus and What is Blockchain?, 2) The Technical Side: Cryptography, Hash Functions, Public Key Cryptography and Signing, Blocks and Blockchain, the Chain, Nodes and Network. The reading materials will help you to expand your knowledge of the materials presented in this modules, 3) Blockchain in Use: Trust Framework and Consensus Mechanisms, Public, Consortium, Private Blockchains, Blockchain Interoperability, When to Use a Blockchain (Limitations and Misconceptions), Implications of Blockchain on Traditional Business, 4) Further Topics: Bitcoin and Ethereum, Ethereum, Smart Contracts, Cryptocurrency Tokens, Wallets and the Marketplaces, and Implications on Traditional Businesses. and 5) Use Cases: Self-Sovereign Identity and Reputation, Ownership and Governance, Supply Chain and Asset Tracking, and Royalties in the Music Industry. {Consensys Academy}

Enterprise Blockchain Templates: Decision-making tools to help assess if and when Blockchain technology is a proper fit for your company. They guide you through the process and make sure you are asking the correct questions, and checking all the boxes. These actionable templates are constructed to reflect the foundational elements of Blockchain: They are

Immutable, Distributed and Decentralized. Template - 1: Do You Need Blockchain? This template presents the user with a list of items that represent the typical selection criteria of a blockchain solution. Template - 2: Blockchain Project Readiness: This tool is based on the user's self-assessment regarding preparations and key actions required to complete the task of Identifying the underlying business issues. Template - 3: Presenting an Enterprise Blockchain Project: This template enables you to make an effective presentation by outlining key points that an enterprise decision-maker has to know to consider your proposed solution. Template - 4: Mapping Enterprise Blockchain vs. Supply Chain Business Processes: Provides you the practical guidance to assess which processes of a supply chain are best candidates for an enterprise blockchain-based implementation project. Better decision-making will help ensure the success of your Blockchain projects. {101 Blockchains}

Hyperledger Fabric Development (Intermediate Level): Hyperledger Development Readiness - Development Tools, Best Practices, Github, Hyperledger Development Tools - Whiteboard - Deployment Considerations, Membership Services, Whiteboard Peers and Nodes, Whiteboard Channels, Ledger and Database Options, Whiteboard Queries, Certificates, Kafka/Raft and Interfaces, Writing Chaincode - Chaincode Development, Whiteboard - Development Considerations, Chaincode Lifecycle and an Interactive Exercise, 4) Writing a Blockchain App. {101 Blockchains}

Introduction to DeFi - Decentralized Finance: DeFi enables parties to trade in a peer-to-peer (i.e., decentralized) fashion the traditional elements of the financial supply chain (e.g., deposits, loans, financial assets) by replacing traditional currency (e.g., dollars, euros) with stable-coins (i.e., cryptocurrency tokens pegged to that currency) and replacing the intermediary (i.e., the financial institution) with blockchain-based smart contracts that run autonomously on a permissionless blockchain protocol (Ethereum for the most part). {101 Blockchains}

NFT Fundamentals (Non-Fungible Tokens): Concepts Behind NFTs, 2) Fundamentals of NFT, 3) History Behind NFTs, 4) NFT Projects Ecosystem, 5) NFT Use Cases, 6) NFT Marketplaces

and Wallets, 7) Create, Buy and Sell NFTs, 8) Challenges to Mass Adoption and The Future of NFTs. {101 Blockchains}

### **III - Publications & Portals**

- Blockchain Advisory Council
- Blockchain Council
- Dapp Radar
- Enterprise Ethereum Alliance
- Ethereum.org
- Ethereum on GitHub
- ETH Global
- Global Blockchain Council

## **IV - Professional Community & Networking**

- <u>Bitcoin | Ethereum | Kadena | CRO | Luna | Polkadot | Solana | Matic</u> (Facebook/Meta 365k members)
- Block Forums
- <u>Crypto-FinTech-Blockchain-NFTs</u> (Facebook/Meta 18k members)
- Ethereum Development & DApps (Reddit 79k members)
- IT & Blockchain Developers (LinkedIn Group 128k members)
- IT, FinTech, Blockchain & Bitcoin (Linked In Group 440k members)
- Solidity Language (Twitter 17k members)

### **Career Transformation Guides for 2022**

- Artificial Intelligence-Machine Learning-Deep Learning
- Blockchain & Ethereum
- Cloud Computing
- Cybersecurity & InfoSec
- Cryptocurrency & Digital Assets
- Data Science
- Finance, Accounting & Banking
- Python, TensorFlow & PyTorch
- Software Development
- Virtualization, Containerization & Networking

## **Genesys Ventures - Web Portals**

- Artificial Intelligence Academy
- Blockchain VIPs
- Cryptocurrency, Blockchain & FinTech Academy
- Cybersecurity Certification Center
- Financial Certification Academy
- Online Learning Central